



**PCT**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

*[Continued on next page]*

A schematic diagram of a computer network topology. At the center is a vertical bus structure labeled 12, 14, and 16. Five computer workstations, each consisting of a monitor (18), a base unit (20), and a keyboard (22), are connected to this central structure. One workstation is connected to the top of the bus, two are connected to the sides, and two are connected to the bottom. A reference numeral 10 points to the entire network assembly.

**WO 02/054300 A2**

WO 02/054300 A2



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## SYSTEM AND METHOD FOR SELECTING A VACATION DESTINATION AND ACCOMMODATION

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

This invention relates broadly to a system and method for data processing. More particularly, this invention relates to an interactive system and method to facilitate the selection of a vacation destination and accommodation by a consumer.

#### 2. State of the Art

There are a number of options available to a consumer over the Internet to provide the consumer assistance in certain aspects of vacation (or holiday) planning. Some sites offer essays on numerous destinations. Wading through the available materials turns vacation planning into a research project. At the other extreme are online booking agent sites which locate airfares and hotels for a stated destination and then permit the consumer to book reservations. These online booking sites provide minimal assistance for the consumer who does not know where he or she wants to vacation or what kind of vacation he or she wants to have. Between the extremes exist myriad other sites which provide a range of services.

For example, several 'personal advisor' sites, e.g., [www.allexperts.com](http://www.allexperts.com) and [www.egulliver.com](http://www.egulliver.com), provide specialists who correspond with consumers via email to provide suggestions on vacation destinations. The specialists are typically freelance travel consultants who help plan and arrange the travel. However, the response time is relatively slow and the recommendation is only as good as the individual specialist.

Other sites, e.g., [www.personalogic.com](http://www.personalogic.com), utilize a structured questionnaire in which consumers rate their preferences (e.g., from 'strong' to 'weak') on a number of vacation criteria. One of the preferences is to what general geographical destination the consumer wants to travel. The

preferences are then extrapolated into recommendations. This analytical methodology provides unconvincing results and requires that the user already have an idea of to where he or she wants to travel.

Another category of sites are 'activity led' sites. These sites specialize in vacation packages or accommodations suited to one type of activity, such as golfing (e.g., [www.golf-travel.com](http://www.golf-travel.com)) or diving (e.g., [www.diveguide.com](http://www.diveguide.com)). The sites generally either list their 'best' ranked resorts in which to perform the activity, or provide information on accommodations. Generally, no guidance is provided on which is the best vacation spot for any particular consumer. In addition, for those consumers who have not yet discovered that they would like a vacation centered around a particular activity, the sites do not provide any assistance; i.e., the web site will likely only be accessed once the consumer has determined on his or her own that he or she wishes to engage in a particular activity.

Directory sites, e.g., [www.brochurebank.com](http://www.brochurebank.com) and [www.holidaywizard.co.uk](http://www.holidaywizard.co.uk), permit consumers to order print brochures from a range of travel operators. The brochures are then mailed to the consumer. While these sites permit a consumer access to information, they present several major limitations. First, no assistance is provided in requesting brochures. Second, there is a limitation on the number of brochures which can be requested. Third, there is a relatively large lag time for receipt of the brochures. Fourth, the consumer still has to sift through the information in the brochures and make a determination as to where he or she wants to travel.

Other sites, e.g., [www.expedia.com](http://www.expedia.com) and [www.holidayswithease.co.uk](http://www.holidayswithease.co.uk), allow consumers to search for vacation packages, but are not suitable for consumers who have not yet determined to where they would like to travel; and as discussed above, all other sites require that the consumer know

the general region in which he or she would like to travel or have a selected activity prior to choosing a destination. There is no site which interactively guides a consumer who does not generally know to where he or she wants to travel and what he or she want to do while on vacation.

#### SUMMARY OF THE INVENTION

It is therefore an object of the invention to provide an interactive system which, based on interactive engagement with a consumer, selects a vacation destination for a consumer.

It is also an object of the invention to provide a method for interacting with a consumer and guiding a consumer in choosing vacation destinations.

It is another object of the invention to provide interactive vacation destination selection systems and methods which do not require the consumer to have prior knowledge of where he or she wishes to travel.

It is still another object of the invention to provide an interactive vacation destination selection system and method which inquire of the consumer a 'type of vacation' which the consumer desires.

It is a further object of the invention to provide an interactive vacation destination selection system and method, which based on the results of the 'type of vacation' inquiry, presents a plurality of categories each having associated attributes, the selection of the attributes within each category resulting in a selected vacation destination, as well as optional accommodations meeting the needs and wants of the consumer.

It is an additional object of the invention to provide an interactive vacation destination selection system in which the

attributes are represented by images, and the images, in total, operate to summarize the consumer's desired vacation.

In accord with these objects, which will be discussed in detail below, an interactive vacation destination selection system is provided which guides a consumer in choosing where the consumer wants to travel. The vacation destination selection system operates through a back end and a front end. The back end identifies criteria which may be important to a consumer, categorizes the criteria, and assigns images to the criteria. In addition, the back end collects data (or attributes) on various vacation destinations serviced by the system and assigns the attributes to the appropriate criteria. The front end to the system assesses what a consumer wants in his or her vacation destination, identifies vacation destinations having the attributes that satisfy those wants, and then displays comparative data on those vacation destinations.

The consumer inputs his or her personal data (e.g., number of travelers, ages of travelers, when the consumer wants to travel, the length of the vacation, the distance from home the consumer is willing to travel, and a budget range), as well as a vacation category; that is, the vacation defined in broad terms (e.g., cruise, sun and beach, activity led, countryside, safari, etc.) into the front end of the system. The front end then displays to the user criteria related to the category and selected from the back end data. Each criterion is preferably represented by an image, and the consumer is able to select one or more of the images to identify the consumer's criteria. The images selected are displayed for the user and together provide a visual representation of the type of vacation being sought by the user. The system compares the consumer's input personal data and selected vacation category, as well as criteria related to that category, with the attributes of all vacation destinations in the back end of the system. The system then identifies vacation destinations which satisfy the consumer's vacation wants (based on the selected criteria) and provides to the consumer a detailed objective comparison of vacation

destinations having attributes which meet the consumer's selected criteria. It will be appreciated that the system is capable of determining a suitable vacation destination for a consumer even without being provided information as to where the consumer wants to travel.

Additional objects and advantages of the invention will become apparent to those skilled in the art upon reference to the detailed description taken in conjunction with the provided figures.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a schematic of the interactive vacation destination selection system according to the invention;

Fig. 2A through 2D together constitute a flow chart illustrating the method of operation of the vacation destination selection system of the invention; and

Figs. 3 through 19 are exemplar 'screen shots' of the front end interface of the vacation destination selection system.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Turning now to Fig. 1, according to the invention, a vacation (or holiday) destination selection system 10 includes a central computer 12 operating a back end data module 14 and a front end interface module 16. The back end module may be implemented as a database of criteria and attributes, as described below, and the front end module may be implemented as a database of HTML (hypertext markup language) files and associated image files which, as also described below, facilitate user interaction with the system. The central computer 12 is in communication with one or more user terminals 18 (e.g., home computers) via the Internet or other computer network. That is, the central computer is preferably a server

12, and the terminals 18 are preferably nodes on the network. The terminals 18 include a display 20 which permits a consumer (user) to view the HTML and image files of the front end module 16 of a remotely located central computer 12, and an input device 22 (e.g., a keyboard, mouse, and/or microphone) which permits the consumer to provide input to the computer 12.

The back end module 14 includes criteria, described in more detail below, which may be important to a consumer in selecting a vacation destination, and which are organized into categories appropriate for the type of vacation and general location selected. Exemplar categories for a beach vacation include: 'destinations', 'local area', 'accommodations', 'important for kids', 'things to do', and 'individual needs', which are described in more detail below.

In addition, data (or attributes) collected on various vacation destinations and accommodations serviced by the system are stored in the back end module and assigned to the appropriate criteria. Attribute includes, with respect to particular destinations and accommodations, the cost, the particular activities offered, features of the locality, food options, etc. For example, if a particular modern hotel located on the beach has both a luxury and standard rooms and a pool, and is located just outside a historic village and also has access to various water sports including sailing and snorkeling, the hotel will be linked with the relevant criteria in the relevant categories:

- 'accommodations': 'hotel', 'modern', 'on the beach',  
                  'luxury', 'standard', 'pool';
- 'local area': 'historic';
- 'things to do': 'sailing', 'snorkeling'.

According to a preferred aspect of the invention, image files are also assigned to each of the criterion within a category. The associated image file may change based upon a consumer's selection of other criteria. The front and back end modules of the system assess what a consumer wants in his



or her vacation destination (based on the consumer's input at the terminal), identifies vacation destinations and accommodations having the attributes that satisfy those wants, and then displays on the terminal comparative data on those vacation destinations and accommodations.

According to another preferred aspect of the invention, the back end module 14 also includes data related to the availability of accommodations. The availability is preferably based on the number of persons seeking accommodations (i.e., number of rooms), the dates of travel, and the budget (i.e., quality level of the accommodations). The data related to accommodation availability is preferably updated at least once daily, and may be provided in real-time to truly reflect current availability. To that end, vendors of the accommodations preferably provide the availability information, and preferably such information in a data format directly usable by the system. Alternatively, prior to providing a list of one or more suitable accommodations which meet the vacation needs of the consumer (as discussed below), the system may electronically query the vacation vendors of the accommodations on the list to determine accommodation availability.

The front end interface module 16 provides an interactive interface which guides the consumer through the selection of criteria desired for a vacation. Then, as described in more detail below, once the criteria have been selected by the consumer, destinations and accommodation having attributes which best meet the wants of the consumer are presented to the consumer for final review by the consumer.

Referring to Fig. 2A, the front end module first requests that the consumer supply information as to who will be traveling; i.e., who (the name of the consumer inputting the requested information) at 100 and the number of travelers and their age ranges (the number of adults, the number of

teenagers, the number of children, the number of infants) at 104. The consumer responds by entering the requested information at 102 and 106. The consumer is also requested to input when he or she wants to travel at 108 (and responds with a month and year at 110), for how long at 112 (and responds by selection of a time period 1-7 days, 10-14 days, etc. at 114), how far away at 116 (and responds with 'this continent' or 'far away' at 118), and a budget range at 120 (and responds with a range of per person costs of up to \$500, \$500-\$1000, \$1000-\$1500, \$1500-\$2000, \$2000-\$2500, and greater than \$2500 at 122). Each of the consumer responses 110, 114, 118, 122 is stored by the computer.

Referring to Fig. 2B, the front end module additionally requests the consumer to provide at 124 an indication of the general type of vacation that the consumer is seeking, e.g., cruise, sun and beach, activity led, countryside, safari, exploration tour, multiple locations, etc. The consumer's response to the request is provided at 126 and then stored. All the above responses, other than the consumer name at 102, are preferably input by the consumer via selection of appropriate check boxes or selection of items from pull down lists.

Then, referring now to Figs. 2B and 3, the front end preferably, though optionally, presents one or more questions to focus the consumer on what he or she wants to achieve on the vacation. A first question 128 presented at 130 is preferably "How do you want to feel on your vacation?". The consumer enters at 132 his or her typed answer, in their own words, in a text box 134. An 'ideas button' 136 is also provided to give the consumer the option at 140 to view previously stored responses of others in order to help formulate the consumer's own answer. The consumer may at 142 select one of the previously stored responses as his or her own answer as an alternative to typing his or her own response. After the user has entered or selected his or her answer, a 'done' button 144 is activated to store at 146 the

answer. Referring to Figs. 2B and 4, a second question 148 "What do you want your overwhelming memory to be?" is presented at 150. The consumer may enter his or her own answer at 152 in a text box 154, or view, at 156, and select at 158 the answer of another. The answer is then stored at 160. The stored answers are used in a postcard file, described below, and for access by others seeking to formulate their own responses.

Based upon the consumer's previous responses, criteria (organized in categories) designed to elicit more particular information from the consumer are prepared for presentation to the user. Referring now to Fig. 2B, if any one or more categories from the standard category set ('destination', 'local area', 'accommodations', 'important for kids', 'things to do' and 'individual needs') are not appropriate in view of the previous responses by the consumer, the category of criteria may be eliminated at 162. For example, if no children are traveling, the 'important for kids' category is preferably eliminated for that consumer. Then, referring to Figs. 2C and 5, based on the type of vacation earlier selected by the consumer (e.g., 'beach and sun') and the age of the travelers (e.g., adults and children), the system displays at 164 on the terminal the remaining categories 166a, 166b, 166c, 166d, 166e, 166f from the standard category set such that the consumer may provide information in order to most appropriately select a vacation destination.

The consumer may select any of the categories 166a-f to provide information in any order. Selection at 168 of any of the categories 166a-f brings up appropriate criteria by which the consumer can more particularly define what he or she wants to experience on the vacation. Referring to Fig. 6, preferably twelve criteria 170 and associated image files 172 are displayed in a two-dimensional array at 174 for each category. While each criteria has an associated image file, the image files do not refer to particular destinations, accommodations, etc., but rather are intended to convey a feeling which the consumer is trying to achieve on the

vacation by selection of the criteria. For example, if a European consumer previously indicated that she wants a European or Mediterranean beach vacation and selects the category of 'destination' 166a, preferably twelve criteria are presented to the consumer; for example, 'sun, sea and sand', 'peace and quiet', 'active', 'places to explore', 'dramatic scenery', 'away from it all', 'romantic', 'lively', 'old world', 'new world', 'holiday location', and 'cultural location'. The consumer may select at 176 none, one, or more (up to all twelve) of the criteria (by marking check boxes) which best reflect how they want to experience their vacation. The selected criteria are added to a postcard' file, which is described in more detail below. In addition, several questions (or options) are presented at 178 to the consumer regarding the mode of travel (air, water, land) 180, the distance willing to travel (in travel time) 182, and the weather of the destination (temperature and/or rainfall) 184. The responses to these questions at 186 also constitute criteria and are stored.

By way of another example, if another European consumer previously indicated that he wants a far away beach vacation and is traveling without children, the selection of the 'destination' category will bring up criteria which may differ from the example above; for example, 'adventurous' 172b (Fig. 7) replaces 'places to explore' 172a (Fig. 6).

Referring back to Fig. 2C, after the consumer makes his or her criteria selections in each category in which he or she desires to provide a criteria selection, the system preferably displays at 187 to the user the number of vacation destinations/accommodations remaining in the system that meet the selected criteria. Such number of accommodations preferably represents the number of accommodations having 'availability' for the consumer based on the back end data.

The consumer may then select criteria from one of the remaining categories shown in Fig. 5. Turning now to Fig. 8,

if the category of 'local area' 166b is chosen next, exemplar criteria 188 for selection by the consumer may include: 'on the strip', 'out of town', 'scenic views', 'seclusion', 'modern', 'heritage', 'passion for food', 'glamorous', 'night life', 'restaurants', 'street cafes', 'local markets'.

The consumer then selects criteria from another category. For example, referring to Fig. 9, with respect to 'accommodation', exemplar criteria 190 include: 'hotel', 'resort', 'apartment', 'villa', 'luxury', 'standard', 'basic', 'modern', 'traditional', 'classic property', 'onsite entertainment', 'gym', 'swimming pool', 'distance to beach', 'food options', and 'number of rooms'. With respect to 'distance to beach', 'food options', and 'number of rooms', options may be selected from a drop down list. Criteria are selected, and the associated images are added to the image postcard. Referring to Fig. 10, with respect to the category of 'important for kids', exemplar criteria 192 include: 'playmates', 'games', 'kids clubs', 'children's pool', 'baby sitting', 'high chairs/cots', 'children's menus', 'safe disco', 'safe beach', 'play area', '4-5 bedrooms', and 'adjoining rooms'. Referring to Fig. 11, with respect to the category of 'activities', exemplar criteria 194 include: 'restaurants', 'family eating out', 'shopping', 'street cafes', 'being pampered', 'romantic evenings', 'clubbing', 'bike/car hire', 'beauty spots', 'historic places', 'museums'. Referring to Fig. 12, with respect to the category of 'individual needs', exemplar criteria 196 include: 'vegetarian meals', 'wheelchair access', 'lift' (or elevator), 'no dogs', 'pets allowed'. The criteria in each category are reviewed by the consumer and desirable criteria are selected. In addition, while not shown, the consumer may add his or her own criteria. The selected criteria and the associated image files are stored in the postcard file.

After the consumer has completed review of the categories and made his or her selection of desired criteria, the consumer is presented at 198 with a preliminary postcard

file 200, as shown in Fig. 13. The preliminary postcard file 200 is a two-dimensional array of the selected criteria and images associated with the selected criteria. If the consumer has selected more criteria than a set maximum number, e.g., fifteen criteria, the consumer is preferably requested at 202 (Fig. 2C), 204 (Fig. 13) to select which criteria to 'keep' and which criteria to 'drop' to bring the number within the maximum number. When required, the consumer indicates which criteria to 'keep' or 'drop' by selection of 'keep' 206 and 'drop' 208 from a drop down list 210 associated with each criteria. 'Dropped' criteria are nevertheless preferably taken into account in evaluating vacation destination recommendations for a consumer. Alternatively, three options may be provided: 'keep', 'drop', and 'remember', in which 'dropped' criteria are not later taken in to account, and 'remembered' criteria are taken into account but given lesser weight than 'kept' criteria.

Referring to Figs. 2D and 14, once the consumer has reduced at 212 the number of criteria to within the maximum number, the consumer is presented with an updated preliminary postcard file 214 at 216. The consumer is then preferably requested, at 216 (Fig. 2D) and 218 (Fig. 218), to prioritize the remaining criteria by ranking the several, e.g., five, most important criteria to the consumer. The consumer ranks at 220 the most important criteria preferably with a pull down list 222 under each of the remaining criteria. This operates to weight the ranked criteria more heavily in the selection process, but preferably does not operate to eliminate the other criteria in the updated preliminary postcard file as factors in the selection process.

After the criteria have been ranked by the consumer, the system makes a determination of which vacation destinations most meet the needs of the consumer. This is done by comparing the attributes of the vacation destination in the system with the criteria of the consumer taking into account the consumer's weighted ranking of the most important

criteria. Moreover, the determination consider which destinations have accommodations available which also meet the consumer's criteria. In addition, referring to Figs. 2D and 15, a final postcard file 228 is prepared and displayed at 230 for the consumer. The final postcard file 228 includes the criteria names and associated image files for the 'kept' criteria 232, with the top-ranked criteria 232a displayed most prominently, e.g., across the top of the postcard. In addition, the final postcard file includes the consumer's responses 234, 236 to the initial questions of "How do you want to feel on your vacation?" and "What do you want your overwhelming memory to be?"; i.e., the responses stored at 146, 160. In addition, the postcard file includes a link (or hyperlink) 238 to a display of the recommended vacation destinations (which can be selected at 240), a link 242 to a list of the reasons for the recommendations (which can be selected at 244), and a link 246 to side-by-side comparisons of the recommendations (which can be selected at 248).

If the consumer selects the link 238 to the display of the recommended vacation destinations, a display 250 such as shown in Fig. 16 is provided at 252 to the consumer. The display 250 preferably includes for each vacation destination 253a, 253b, a photograph 254, a map 256, basic information on the locale 258, the weather 260, a URL (uniform resource locator) hyperlink to more information 262, recommended available accommodations 264, prices 266, access 268. While generally only available accommodations are shown, if current 'availability' is not in the back end data, e.g., because a vendor has not provided updated availability data to the system, the system may present general availability information for an accommodation, as indicated at 270.

If the consumer selects the link to the list of the reasons for the recommendations, a worksheet 272 such as shown in Fig. 17 is provided at 273 to the consumer. The worksheet 272 indicates the choices made with respect to the 'destination' 274, 'local area' 276, and 'accommodation'

categories 278. The worksheet displays the number of destinations remaining 280 after each criteria selection by the consumer. The consumer is able to edit, via selection of 'edit' buttons 282 and 'on/off' buttons 284 the reasons and see how such changes affect the recommendations. For example, Fig. 18, the worksheet 272 indicates that by changing various criteria (permitting greater rainfall at 286 and not limiting the accommodation to a resort at 288) additional recommendations 290 for a vacation destination are made by the system. Throughout the interactive selection process the number of possible options which satisfy the selection criteria are shown thereby ensuring the consumer can see the number of remaining options.

Fig. 19 displays the side-by-side comparisons 292 of the recommendations, permitting the consumer to analyze in detail various details of the recommendation (e.g., size of the accommodations, full board options, distance to beach, number of swimming pools, restaurants and bars, whether the accommodations have a fitness center, sauna, casino, or golf course, etc.) to facilitate making a final choice. Finally, the consumer may select one of the recommended vacation packages for purchase. To facilitate the purchase, a referral link may be provided to an online ticket and hotel booking service, a phone number for a travel agency may be provided, or the front and back end modules may include the necessary forms and data, which are known in the art, to complete the transaction.

By providing basic information on the travelers, and general information on how far the travelers are willing to travel, the preferred weather conditions, a budget range, and the selection of criteria from one or more categories, the system 10 is capable of determining a suitable vacation destination, even without being provided information as to where the consumer wants to travel.



Finally, the consumer is able to electronically book a vacation which the consumer selects. Upon booking, it is preferred that the accommodation availability data be updated to reflect the booked vacation.

There has been described and illustrated herein an embodiment of an interactive system for the selection of a vacation destination and a method of selecting a vacation destination. While a particular embodiments of the invention has been described, it is not intended that the invention be limited thereto, as it is intended that the invention be as broad in scope as the art will allow and that the specification be read likewise. Thus, while the consumer is presented with a number of categories from which to choose criteria, the consumer does not need to review the criteria in all the categories; an appropriate selection of a vacation destination may nevertheless be made by the system, provided that criteria in a non-reviewed category are not essential to the consumer's enjoyment of the vacation. In addition, while particular criteria have been disclosed for use within the various categories, it will be appreciated that other categories, e.g., sports available, and other criteria within the disclosed categories may be used as well. Furthermore, while the vacation destination selection system is preferably implemented with a global computer network, it will be appreciated that the system may also be implemented in another interactive medium, for example, an in-travel agency kiosk, portable digital media, e.g., CD-ROMs and DVDs, or via interactive television, such that a stand-alone (non-networked) computer system or television is utilized to implement the system. Moreover, while a front end module and back end module are discussed as distinct databases, it will be appreciated that the modules may operate as portions of a common database. In addition, while two preferred focus questions are disclosed for preferable presentation to the consumer, other or additional questions may be used. Moreover, while the focus questions are intended to aid in consumer selection of criteria as well as be displayed on the

postcard, it will be appreciated that a natural language parser may be used to incorporate the response into the vacation destination selection process. Also, while the front end is preferably implemented in a series of HTML files, it will be appreciated that other file types (e.g., VRML, JAVA applets, etc.) may also be used to implement the front end. It will therefore be appreciated by those skilled in the art that yet other modifications could be made to the provided invention without deviating from its spirit and scope as claimed.

## Claims:

1. An interactive vacation destination selection system, comprising:

a) a computer including data files and user interface files, the data files including vacation criteria and attributes from a plurality of vacation destinations, said attributes being assigned to one or more of said vacation criteria;

b) a terminal in communication with said computer;

c) a display; and

d) a user input device,

said terminal adapted to receive said user interface files and said vacation criteria from said computer and to display said user interface file and said vacation criteria on said display,

wherein upon selection via the user input device of a plurality of said displayed vacation criteria, said computer provides a recommendation of at least one vacation destination which is displayed on said display of said terminal.

2. An interactive vacation destination selection system according to claim 1, wherein:

said user interface files are HTML files.

3. An interactive vacation destination selection system according to claim 1, wherein:

at least a plurality of said criteria each has a respective associated image file.

4. An interactive vacation destination selection system according to claim 3, wherein:

said image file associated with one of said criteria is changeable dependent upon the selection of another of said criteria.

5. An interactive vacation destination selection system according to claim 1, wherein:

said criteria are organized into categories, said categories including at least two from the group: destination, local area, accommodation, activities, suitability for children, and individual needs.

6. An interactive vacation destination selection system according to claim 1, wherein:

said user interface files include requests for input with respect to at least six of the following inquiries: the age ranges of travelers, when the user wants to travel, for how long the user wants to travel, how far away the use wants to travel, a budget range for the vacation, and a general type of vacation sought.

7. An interactive vacation destination selection system according to claim 1, wherein:

said user interface files include focus inquiries to focus a user on what the user wants to experience on a vacation.

8. An interactive vacation destination selection system according to claim 1, wherein:

said computer prepares a file collecting selected displayed vacation criteria and image files.

9. An interactive vacation destination selection system according to claim 1, wherein:

said recommendation of at least one vacation destination includes for each vacation destination at least four of: a photograph, a map, information about the destination, the weather of the destination, a hyperlink to additional information about the destination, recommended accommodations, prices, access, and availability.

10. An interactive vacation destination selection system according to claim 1, wherein:

said user interface files includes means for editing selected criteria such that the computer presents modified recommendations.

11. An interactive vacation destination selection system according to claim 1, wherein:

the data files include accommodation availability data for vacation destinations,

said vacation destination displayed has accommodation availability.

12. A method for selecting a vacation destination, comprising:

a) presenting to a user inquiries with respect to criteria for a vacation destination, none of said inquiries requesting the user to indicate where the user wants to vacation;

b) selecting a plurality of said criteria by the user;

c) determining from said selected plurality of criteria at least one recommended vacation destination for the user; and

d) outputting to said user said at least one recommended vacation destination.

13. A method according to claim 12, wherein:

said selecting includes selecting a general type of vacation.

14. A method according to claim 12, wherein:

said criteria each have an associated image file.

15. A method according to claim 14, wherein:

each said associated image file is a photographic image.

16. A method according to claim 14, wherein:

said presenting includes arranging said criteria and said associated image files in a two-dimensional array.

17. A method according to claim 12, further comprising:

e) after selecting, ranking a subset of said plurality of selected criteria.

18. A method according to claim 12, further comprising:

e) after selecting and prior to determining, providing to the user a display of said selected criteria and requesting the user to remove at least one of said criteria.

19. A method according to claim 12, further comprising:

e) after outputting, editing said selected criteria by the user.

20. A method according to claim 19, wherein:

said editing includes removing at least one of said selected criteria.

21. A method according to claim 12, wherein:

said output of said recommendation includes for each vacation destination at least four of: a photograph, a map, information about the destination, the weather of the destination, a hyperlink to additional information about the destination, recommended accommodations, prices, access, and availability.

22. A method according to claim 12, further comprising:

determining from said selected plurality of criteria at least one recommended vacation destination for the user

e) prior to outputting, checking availability of the determined at least one recommended vacation destination.

23. a method according to claim 12, further comprising:

e) booking one of the at least one recommended vacation destination.

1/22

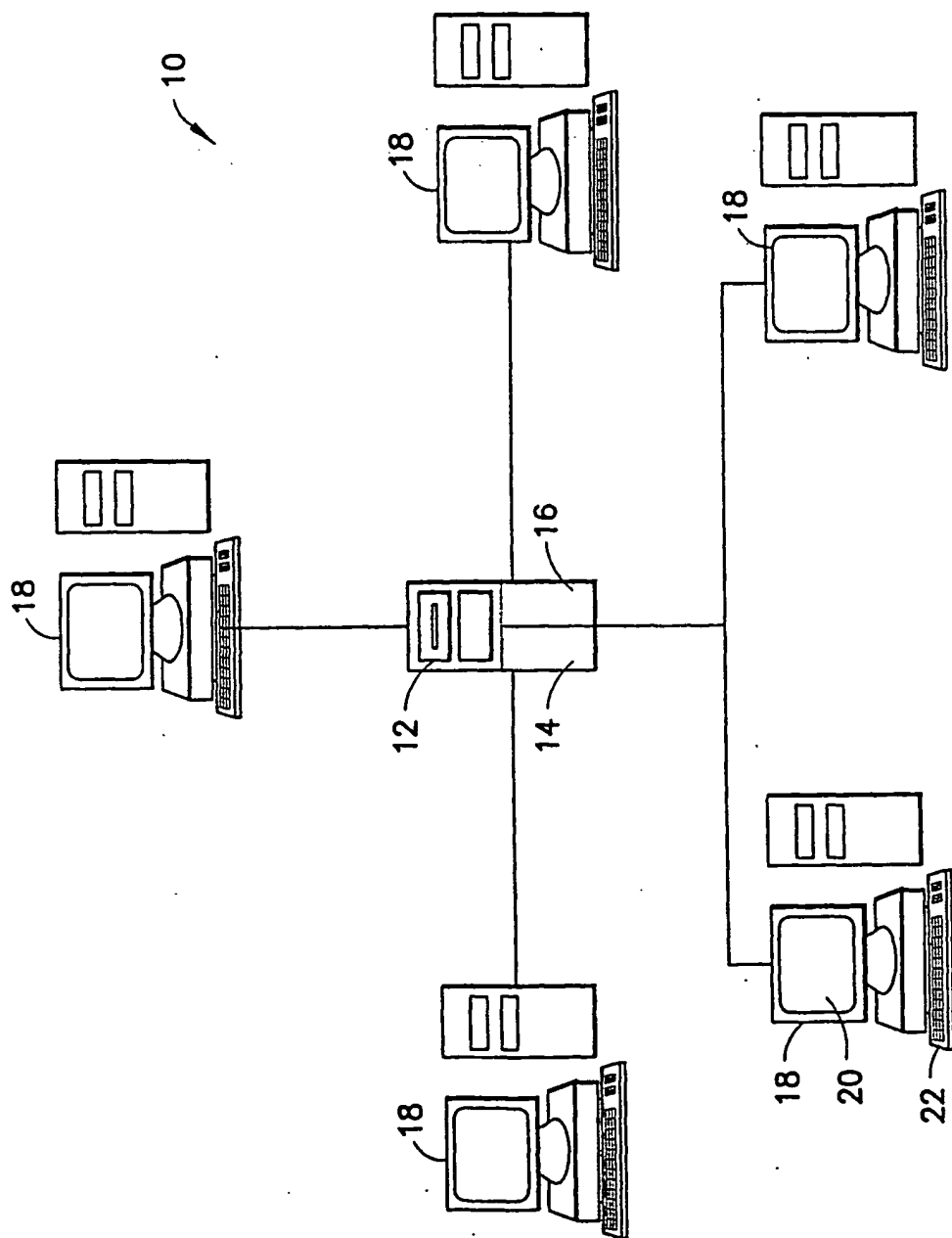


FIG.1

2/22

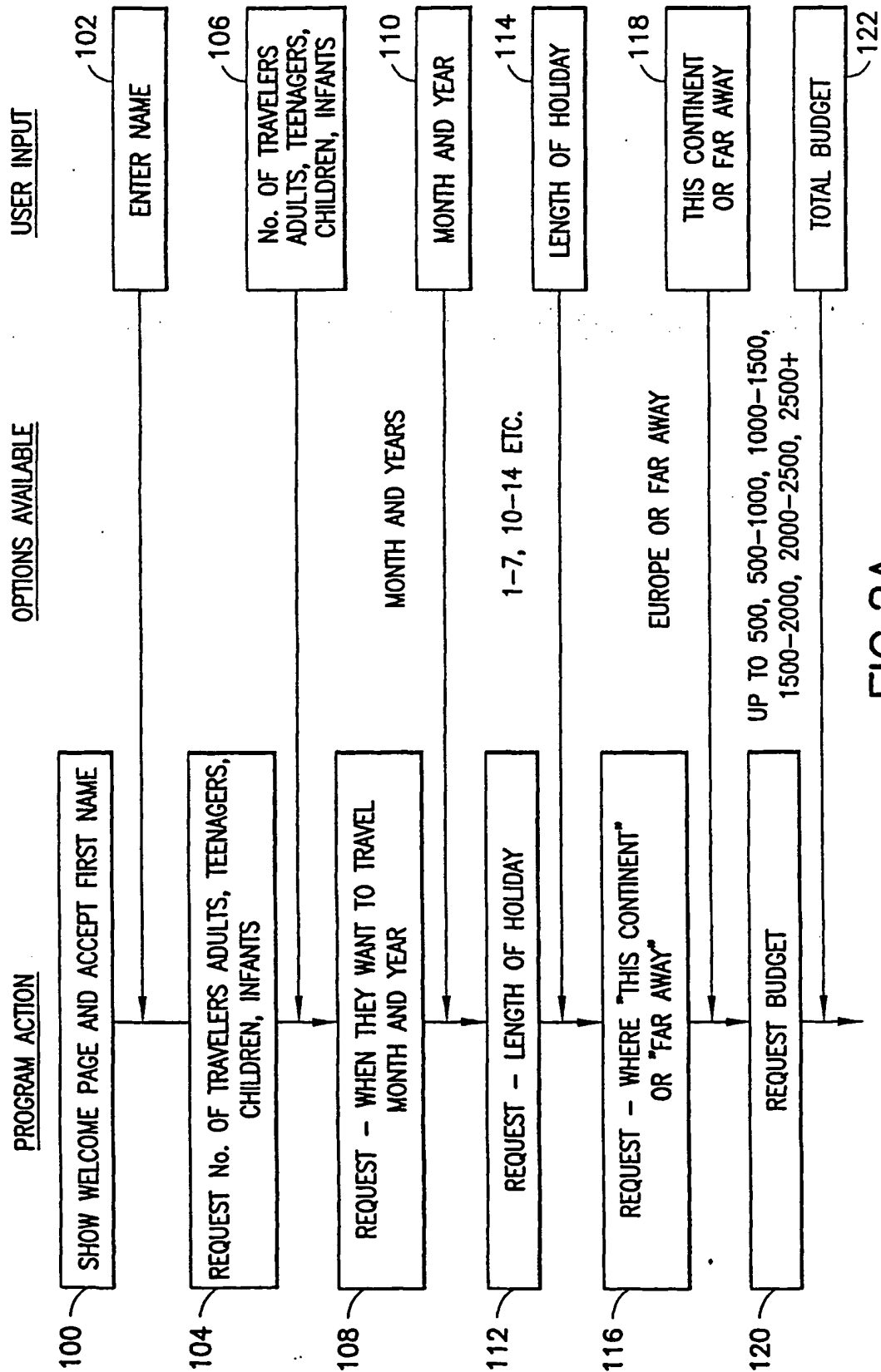


FIG.2A



3/22

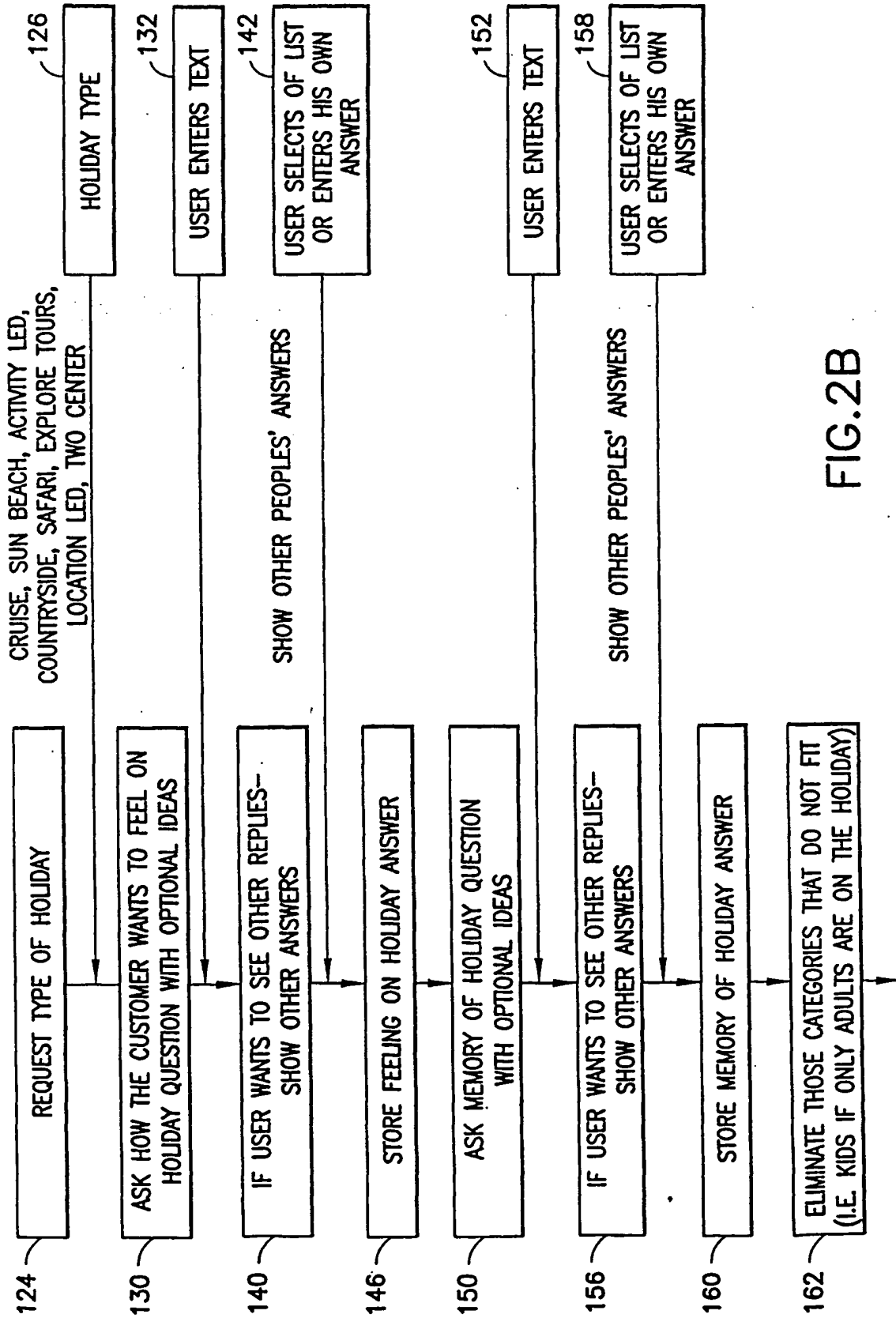


FIG.2B

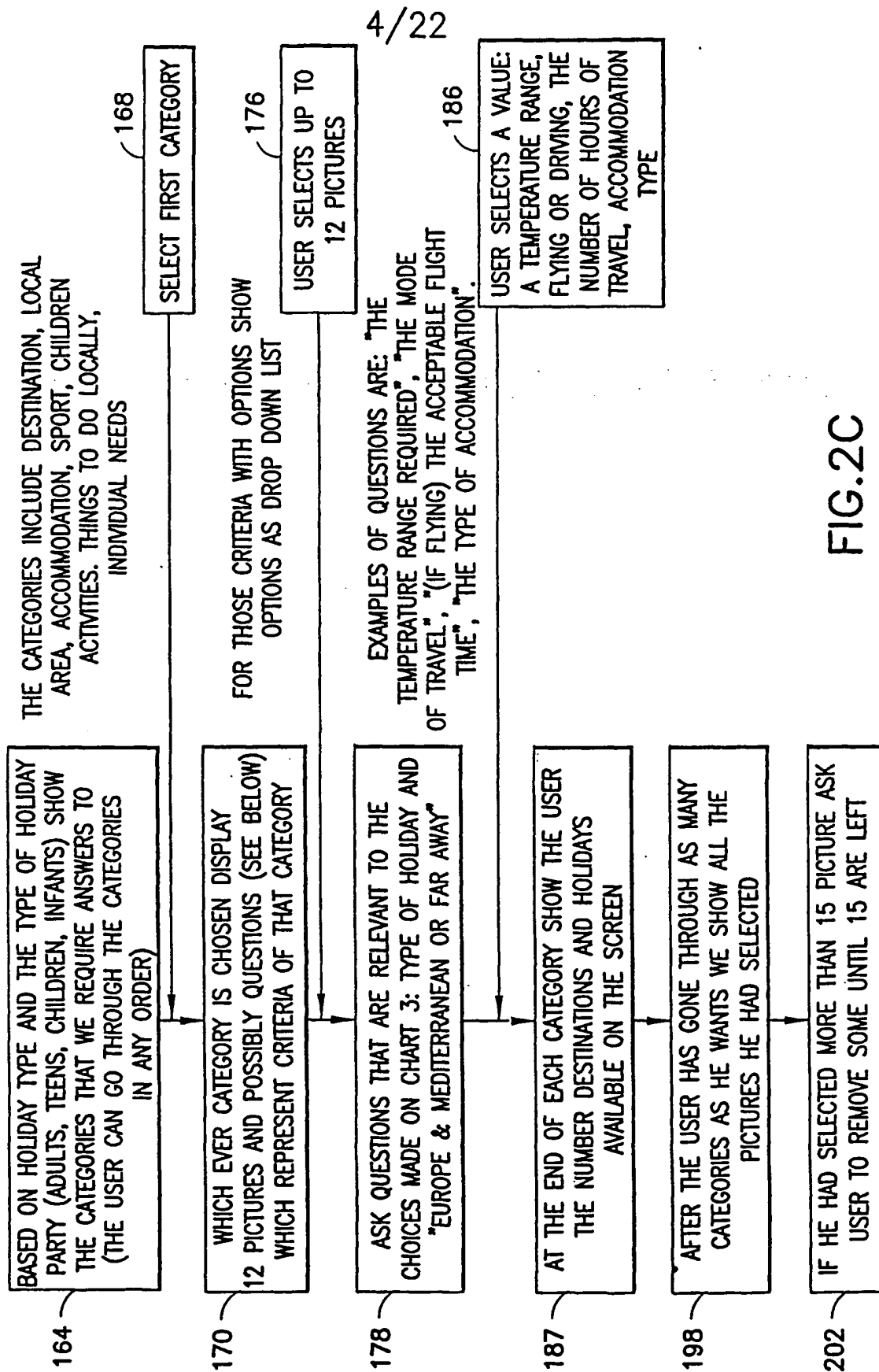
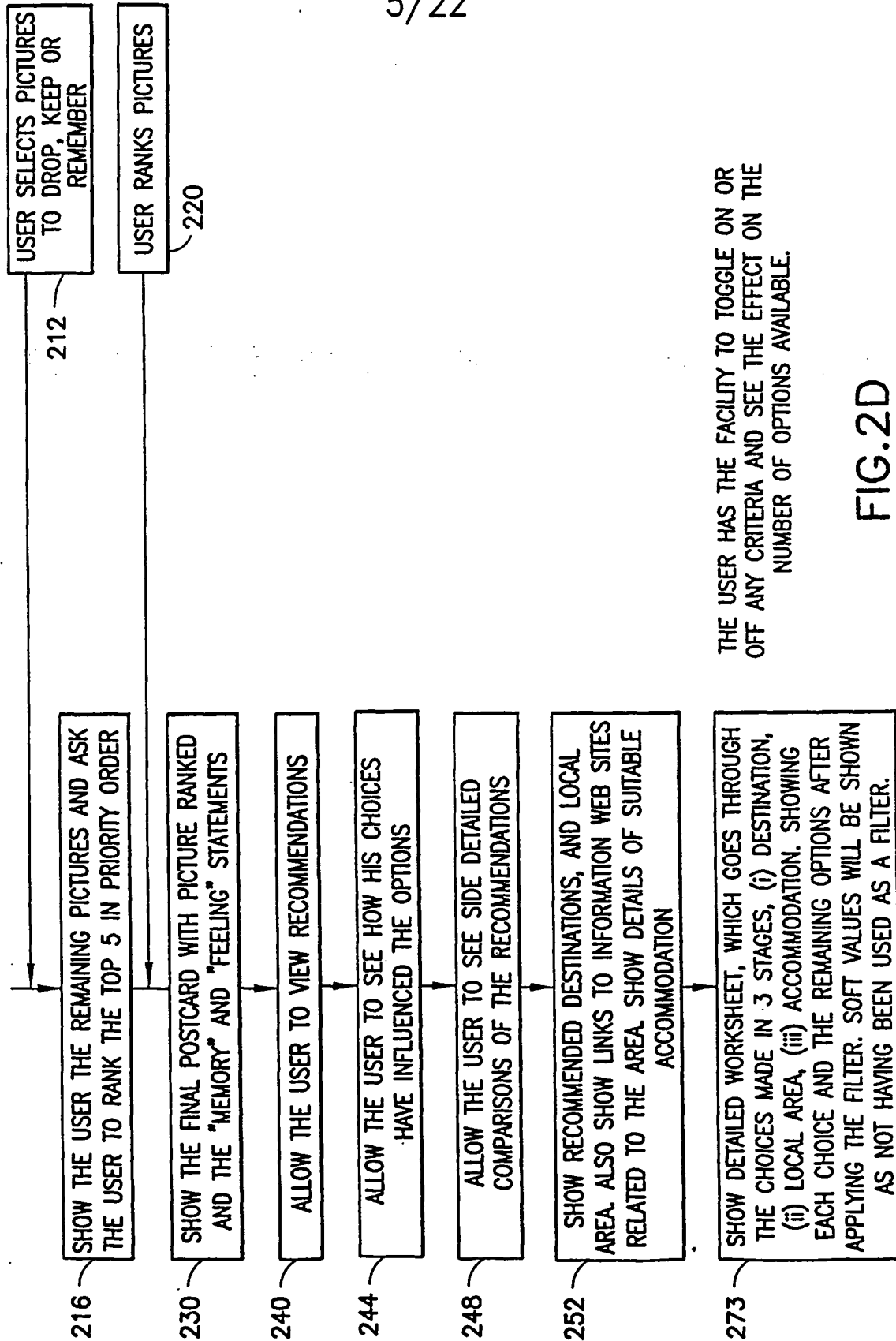


FIG.2C

5/22



THE USER HAS THE FACILITY TO TOGGLE ON OR OFF ANY CRITERIA AND SEE THE EFFECT ON THE NUMBER OF OPTIONS AVAILABLE.

FIG. 2D

6/22



Let's establish the two most important aspects of any holiday ?

Firstly,

128 — How do you want to feel on this holiday ?

134

Feel free to have a look at what other people have said.

ideas

136

Done!

144



How can we help ?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations



FIG.3

7/22



Let's establish the two most important aspects of any holiday ?

Firstly,

128 — How do you want to feel on this holiday ?

134 —

136 — **Ideas** Feel free to have a look at what other people have said.

**EDIT**

148

What do you want your overwhelming memory to be ?

154 —

**Ideas** Feel free to have a look at what other people have said.

**EDIT**



How can we help ?

Type of Holiday

Getting clear

Your Postcard

Recommendations

Rob's Postcard

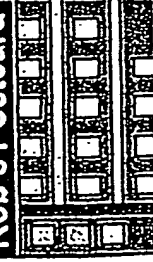


FIG. 4



8/22

You can do as many or as few of these getting clear sections as you want, and in any order. Remember your finished card is limited to fifteen images, but if you do choose too many from these sections you can always drop some to make your final list.

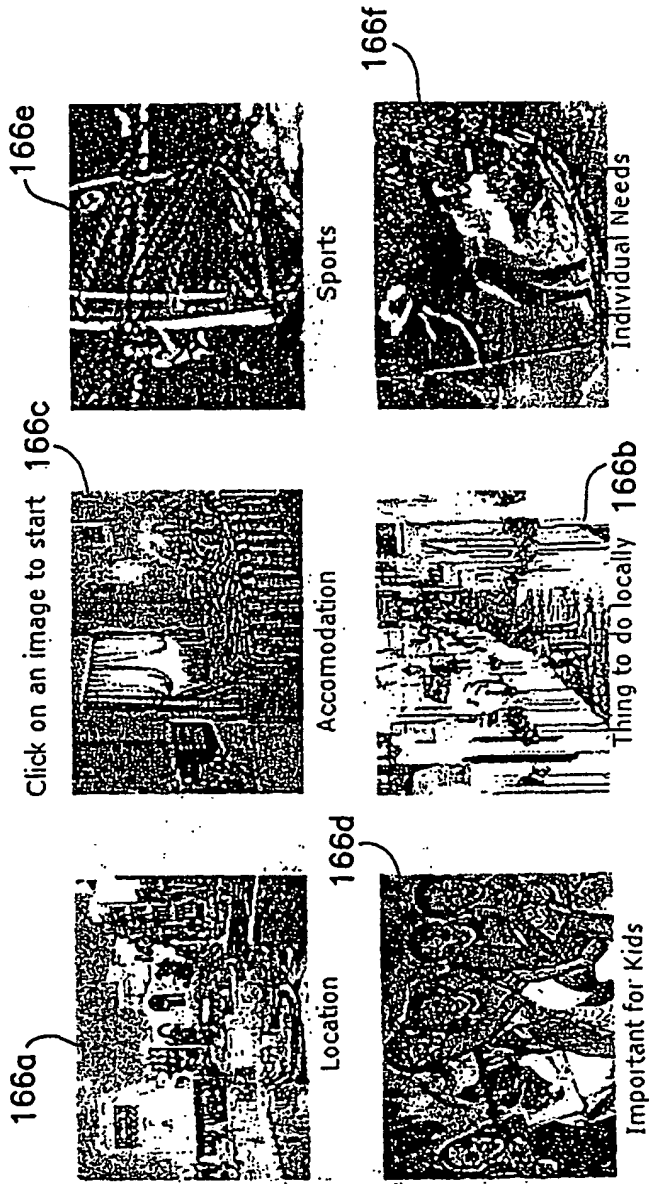


FIG.5



Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area



How can we help?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations





10/22

**Airtours**  
The Holiday Makers

Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area


**Stop & Save**

How can we help?  
Type of holiday  
Getting clear  
Your Postcard  
Recommendations


**Rob's Postcard**

## What sort of far away Beach destination do you fancy?


Check white boxes on the ones for you. Not too many!




Sun, Sea & Sand




Peace & Quiet




Active




Adventurous




Dramatic Scenery



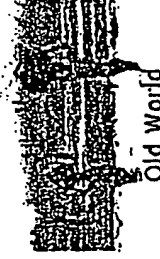
Island




Romantic




Lively




Old World



New World



Holiday Location



Cultural Location

What temperature suits? 80 > 90 ☐ What about flight times? 8-12 hrs ☐

How much rain is OK? under 3" ☐ Do you mind getting? Jobs No Visa No

GO

FIG. 7

SUBSTITUTE SHEET (RULE 26)



11/22

**Airtours**  
The Holiday Makers


Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area


**Stop & Save**  
How can we help?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations


**Rob's Postcard**


## What do you want to be able to do in the local area?


Select the things that interest you most. But please note that the actual places featured whilst in Europe may not be in the Area you are going to.


  
Restaurants


  
Family eating out


  
Local Markets


  
Gift Shopping


  
Street Cafes


  
Be Pampered


  
Romantic Evenings

  
Clubbing

  
Bike/Car Hire

  
Beauty Spots

  
Historic Places

  
Museums

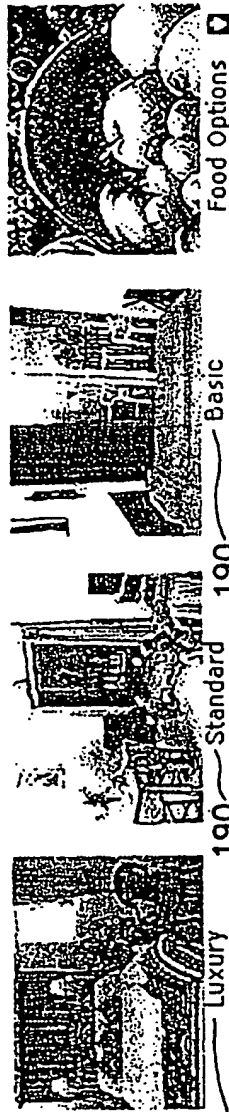
**FIG.8**

SUBSTITUTE SHEET (RULE 26)

12/22

# What kind of accommodation do you want ?

Where would you like to stay? Hotel Resort Apartment Villa



Food Options

Basic

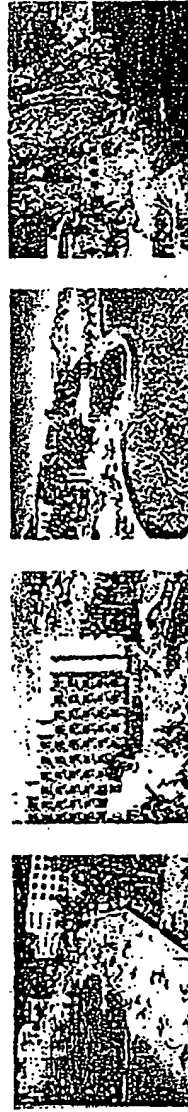
Standard

190

Luxury

On the Strip

190



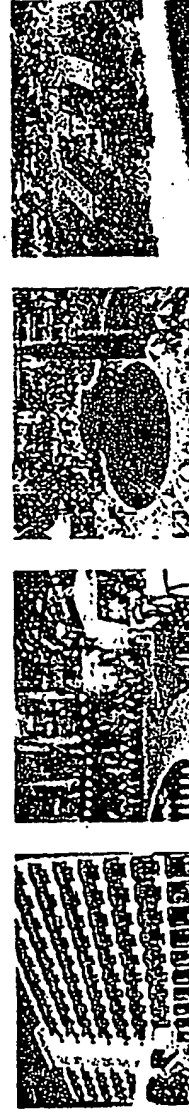
Scenic

Out of town

Urbane

On the Strip

190



Distance to Beach

Swimming Pool

On site Entertainment

Number of Rooms

190

190

190

190

190

190

190



Distance to Beach

Swimming Pool

On site Entertainment

Number of Rooms

190

190

190

190

190

190

190

190

190

190

190

190

190

190

190

190

FIG.9



Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area



How can we help ?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations



13/22

What is going to be important for your kids ?



Children's Pool



Safe Disco



Ajoining Rooms



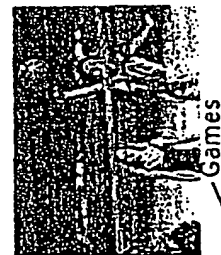
Kids Club



Children's Menus



4-5 Bed Rooms



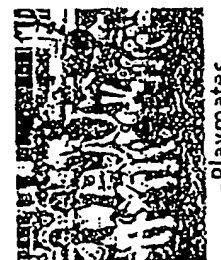
Games



High Chairs/Cots



Play Area



Playmates



Baby Sitting



Safe Beach

FIG.10



Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area



How can we help ?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations



14/22

FIG. 11

# What do you want to do on holiday ?

Select the things that interest you most. But please note that the actual places featured whilst in Europe may not be in the Area you are going to.



Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area

194



How can we help ?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations



Restaurants



Family eating out



Shopping



Shopping



Street Cafes



Be Pampered



Romantic Evenings



Clubbing



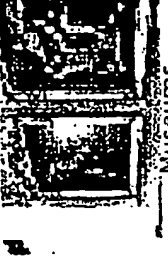
Bike/Car Hire



Beauty Spots



Historic Places



Museums

15/22

# Individual Needs -



Get Clear Menu  
Location  
Where to stay  
What to do  
Key for children  
Treats for others  
Local Area



How can we help ?  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendations



196  
vegetarian  
Meals



196  
Wheelchair  
Access

196  
No need to  
climb stairs  
or Lift



Owners Pets  
allowed



196  
No Dogs at  
Property

196  
Owners Pets  
allowed

Write your own  
.....  
.....

Write your own  
.....  
.....

Write your own  
.....  
.....

FIG.12

16/22

**You have selected 23 images, which now need to be reduced to 15. Please drop 7 by clicking on the tabs to indicate which to keep or drop. We will take account of any you drop in evaluating recommendations**

**Rob's personal Postcard - May 2001**

206

1st 2nd 3rd 4th 5th

Hideaway gems  
206

2 Adults  
2 Children

Europe  
& Med

Sun-  
Beach

10-14  
days

Budget:  
£2000-  
2500

Resort  
Drop

Desert Island  
Drop

Lively  
Keep

Romantic  
Drop

Landmark Cities  
Keep

Resort  
Keep

Harbour Views  
Keep

Harbour Views  
Keep

Inspirational  
Keep

Scenic Coast  
Drop

Scenic Coast  
Drop

Hilltop Retreat  
Keep

Dramatic  
Keep

Desert Island  
Keep

Desert Island  
Keep

200

FIG.13

17/22

218

Prioritise your top five, which will then appear on the top row of your postcard.  
The remainder of your preferences will appear below and will still be used in our recommendations.

**Rob's personal Postcard - May 2001**

	1st	2nd	3rd	4th	5th
2 Adults 2 Children					
Europe & Med					
Sun Beach					
10-14 days					
222					
Budget: £2000- 2500					
Top 5					

214

FIG.14

**Rob's personal Postcard - May 2001**

**18/22**

**228**

**234 ~Memory of being a family that I'll cherish forever**

**236 ~Feel happy and away from it all**

**SUGGEST = view recommendations. REASONS = how your criteria worked. Change if required**

**238**

**242**

**246**

**1st**

**2nd**

**3rd**

**4th**

**5th**

**Priorities**

**Hideaway gems**

**Landmark Cities**

**Romantic**

**Hilltop Retreat**

**Dramatic**

**Inspirational**

**Scenic Coast**

**Desert Island**

**Lively**

**Romantic**

**Budget: £2000-2500**

**2 Adults 2 Children**

**Europe & Med**

**Sun Beach**

**10-14 days**

**Edit**



19/22

254

253a **Barbados**

258

256

260

262

**RECOMMENDATIONS**

264 **ALMOND BEACH CLUB**  
Holetown St James

161 rooms, in beautiful 32 acre gardens, all with air conditioning. Choice of restaurants and bars. Beach front; Pools; Tennis Courts; Watersports; Spa, and wide range of pampering and relaxation treatments.

266

PRICE:  
2 Adults x 14 nights @ circa £4125  
7 Nights 1229 extra nights 119  
Full board; local drinks; and sports

268 **FLIGHTS:**  
Heathrow: Mon/Thurs/Sun  
Gatwick: Daily

270 **AVAILABILITY:**  
May usually shows some spare capacity.

264 **CORAL REEF CLUB**  
Holetown St James

85 rooms, in beautiful gardens, all spacious with air conditioning. Choice of restaurants and bars. Beach front; Pools; Tennis Courts; Watersports; Spa, and wide range of pampering and relaxation treatments.

250

PRICE:  
2 Adults x 14 nights @ circa £4538  
7 Nights from 1296 extra nights 139  
Full board; local drinks; and sports

**FLIGHTS:**  
Heathrow: Mon/Thurs/Sun  
Gatwick: Daily

**AVAILABILITY:**  
May usually shows some spare capacity.

253b **Aruba**

**RECOMMENDATIONS**

**ARUBA MARRIOTT RESORT**  
Palm Beach

411 rooms, in 10 acres tropical gardens, all with air conditioning. Choice of restaurants and bars. Beach front with Pool; swim up bar; Tennis Courts; Watersports; Spa; Sauna; Shops and Casino.

PRICE:  
2 Adults x 14 nights @ circa £3098  
Room Only  
7 Nights from 1069 extra nights 68

**FLIGHTS:**  
Daily via Amsterdam

**AVAILABILITY:**  
May usually shows some spare capacity.

Rob's Postcard

FIG. 16

SUBSTITUTE SHEET (RULE 26)

272

21/22



# This is how your choices influenced your options

TYPE OF PACKAGE	Sun/Beach	<a href="#">[Edit]</a>	139 destinations with 7,500 hotels/villas/apartments
DURATION	10-14 days	<a href="#">[Edit]</a>	139 destinations with 7,500 hotels/villas/apartments
TRAVELLERS	2 adults	<a href="#">[Edit]</a>	139 destinations with 7,500 hotels/villas/apartments
HOW FAR ?	Far Away	<a href="#">[On/Off]</a>	92 destinations
BUDGET	2500-3000	<a href="#">[On/Off]</a>	92 destinations
FLIGHT TIME	8-12 hrs	<a href="#">[On/Off]</a>	36 Destinations
DATE	May	<a href="#">[On/Off]</a>	36 Destinations
TEMPERATURE	80-90	<a href="#">[On/Off]</a>	Kenya (Mombasa/Malini), Maldives, Seychelles, Sri Lanka, Antigua & Aruba, Bahamas, Barbados, Cayman, Cuba, Grenada, Jamaica, Nevis, St Kitts, St Lucia, Trinidad & Tobago, Turks & Caicos, Orlando and China (Peking)
RAINFALL	under 3"	<a href="#">[On/Off]</a>	Kenya (Mombasa/Malini), Maldives, Seychelles, Sri Lanka, Antigua & Aruba, Bahamas, Barbados, Cayman, Cuba, Grenada, Jamaica, Nevis, St Kitts, St Lucia, Trinidad & Tobago, Turks & Caicos, Orlando and China (Peking)
LOCAL AREA	Resort	<a href="#">[On/Off]</a>	Kenya (Mombasa/Malini), Maldives, Seychelles, Sri Lanka, Antigua & Aruba, Bahamas, Barbados, Cayman, Cuba, Grenada, Jamaica, Nevis, St Kitts, St Lucia, Trinidad & Tobago, Turks & Caicos, Orlando and China (Peking)
	Romantic	<a href="#">[On/Off]</a>	A matter of personal judgement
	Inspirational	<a href="#">[On/Off]</a>	A matter of personal judgement
	Glamorous	<a href="#">[On/Off]</a>	Barbados, St James Beach, Auba, Palm Beach, Grenada, Grand Anse Beach, Antigua, English Harbour, Nevis, Pinney's Beach, Jamaica, Montego Bay
ACCOMMODATION	Luxury	<a href="#">[On/Off]</a>	Barbados, St James Beach x 3, Aruba, Palm Beach x 1, Grenada, Grand Anse Beach x 3, Antigua, English Harbour x 1, Nevis, Pinney's Beach x 1, Jamaica, Montego Bay x 3
	Full Board	<a href="#">[On/Off]</a>	Barbados, St James Beach x 3, Aruba, Palm Beach x 1, Jamaica, Montego Bay x 3
	Pool	<a href="#">[On/Off]</a>	Barbados, St James Beach x 3, Auba, Palm Beach x 1, Jamaica, Montego Bay x 3
	Beachfront	<a href="#">[On/Off]</a>	Barbados, St James Beach x 3, Auba, Palm Beach x 1, Jamaica, Montego Bay x 2
SPORTS	Suba Diving	<a href="#">[On/Off]</a>	Barbados, St James Beach x 3, Auba, Palm Beach x 1, Jamaica, Montego Bay x 2
THINGS TO DO	Restaurants	<a href="#">[On/Off]</a>	Barbados, St James Beach = Amond Beach Club = Coral Reef Club Auba, Palm Beach = Aruba Marriott Resort Jamaica, Montego Bay = Tryall = Half Moon Club

## Stop & Save

How can we help  
Type of Holiday  
Getting clear  
Your Postcard  
Recommendation



272

FIG.18

22/22



## Detailed side-by-side comparison of options

292

HOTEL	Royal Hideaway	Tamarind Cove
DESTINATION	Mexico	Barbados
LOCAL AREA	Yucatan Peninsula	St James Beach
TRANSFER TIME	45 mins	40 mins
NO OF ROOMS	200	166
FULL BOARD	Yes	Yes
DISTANCE TO BEACH	Beachfront	Beachfront
SWIMMING POOL	2 main + 2 relax	4 main + 2 whirl
BARS	3	4
FITNESS CENTRE	Yes	Yes
SAUNA	Yes	No
RESTAURANTS	5	1
ON-SITE ENTERTAINMENT	Nightly	Nightly
SPORTS FACILITIES	Kayaks, windsurfing, snorkeling, catamaran, Sailing, Water Polo, Bike Hire	Waterskiing, Windsurfing, Sunfish & Catamaran sailing kayaks, snorkelling all with tuition
MASSAGE	Yes	No
COCKTAIL PARTY	Weekly	No
CASINO	Yes	No
GOLF COURSE	Nearby	
ROOM SERVICE	Yes	No
GARDEN ROOMS	Yes	Yes
SUPERIOR ROOMS	Yes	Yes
STANDARD ROOMS	Yes	Yes
AIRCONDITIONING	Yes	Yes
TELEPHONE IN ROOM	Yes	Yes
TV + SATELLITE In ROOM	Yes	TV
CD HIFI In ROOM	Yes	No
RATES MAY 7 nights	1397	917
RATE MAY Extra Nights	133	75
RATE MAY Ocean View Twin	17	9
RATE MAY Jun Suit Pool/Garden View		19 19
RATE MAY Jun Suite Ocean view		32



FIG.19

SUBSTITUTE SHEET (RULE 26)

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☒ **BLACK BORDERS**

☒ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☐ **FADED TEXT OR DRAWING**

☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☒ **SKEWED/SLANTED IMAGES**

☒ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**